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Consensus, Institutions, and Supply Response

The Political Economy of Agricultural Reforms in Sub-Saharan Africa

Ataman Aksoy
Anil Onal

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Abstract

During the late 1980s and the 1990s, most countries in Sub-Saharan Africa implemented agricultural policy reforms, along with national political and economic reforms. The agricultural reforms focused on opening up processing and marketing activities to increased competition and eliminating export taxes and restrictions to improve producer incentives. In eight of nine country/commodity case studies analyzed in this paper, output responded positively in the short run to the reforms. In many cases, however, the initial supply response was not sustained in the face of subsequent shocks. The studies suggest that stakeholder consensus on the distribution of sector-specific rents is a key variable affecting the sustainability of supply responses. Agricultural sector reforms lead to large changes in income distribution. The greater the acceptance of the distribution of rents following the reforms, the better sectors are able to accommodate subsequent shocks. In cases where the initial consensus on the distribution of rents is weak, shocks lead to reform reversals in some cases or an inability to design necessary support institutions in others. The diversity in outcomes across similar products and countries suggests it is possible to achieve sector and local level results that differ from national ones.

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Consensus, Institutions, and Supply Response:

The Political Economy of Agricultural Reforms in Sub-Saharan Africa

Ataman Aksoy and Anil Onal*
World Bank

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Introduction

In the late 1980s and during much of the 1990s, many countries in Sub-Saharan Africa (SSA) initiated agricultural policy reforms either as part of wider structural adjustment programs or as self-standing reform programs. Agricultural growth rates recorded after the reforms have been uneven and in many countries the sustained agricultural growth observed in Asia and Latin America was not replicated (Akiyama *et al* 2001 and 2003). Kherallah *et al* (2002, p. 157) conclude that: “Despite positive changes in some sectors and some countries, the overwhelming current consensus is that the overall limited supply price response in Sub-Saharan Africa is due to structural and institutional constraints that have been ignored by market reforms.” Baffes and Garner (2003) have shown that outcomes are highly diverse and that it is not straightforward to determine the reasons for success and failure.

This paper summarizes the findings of nine country case studies of commodity market reforms in SSA. These expand on previous work by placing the reforms in the context of the political economy of redistribution generated by the policy changes, and focusing on the ability of the new institutional structures created through the reforms to accommodate shocks (North *et al* 2009). We adapt the analytical framework developed by Rodrik (1999) to analyze GDP growth patterns, which suggests that the ability to respond to negative external shocks is related to the degree of social conflict and prevalent institutions of conflict management. The agricultural policy reforms implemented in the late 1980s and 1990s in SSA involved the reduction or elimination of regulatory and fiscal constraints on the private sector, redistributing income from the previous groups of intermediaries to the producers, many of whom were smallholders. In order for this redistribution to be sustained and successful there had to be some agreement among the stakeholders on the desirability and acceptability of the new set of arrangements, and the resulting income distribution.

During the initial stage that followed a policy reform such as marketing liberalization, there was often a surge in private sector activity resulting from increased producer prices as competition among traders increased or because export taxes were reduced. Producers responded to these higher prices and re-committed to the crop or activity. During this stage, production often increased and the reform appeared to be successful. These initial positive responses were reversed in many cases when unforeseen developments or shocks took place such as a price collapse, crop diseases, and/or private sector became unsuccessful in its efforts. Such initial positive responses and the subsequent reversals suggest the distinction between growth accelerations and sustained growth episodes also can apply at the sectoral level.[1]

[1] The timing of the reforms - mostly in the early 1990s- coincided with increases in international commodity prices. The period 1990-1997 was characterized by increasing international commodity prices. These prices began to decline in 1997 in tandem with the Asian financial crisis. The period of declining and low prices continued until 2002 after which there was another price increase in a price spike in 2008. The price declines that occurred after 1997 were passed on to the producers but, in most of the cases in our sample, the post-2000 price increases were not passed on

Our main hypothesis is that the capacity to respond to external and internal shocks depends on the degree of political and social consensus on the reforms. In cases where the first-stage positive supply response could not be sustained, the degree of political and social consensus on the reforms was also found to be weak from the beginning. Moreover, adequate mechanisms to redistribute income following a negative shock were not built into the new institutional arrangements. In cases where there was sustained growth despite the shocks, there was greater agreement on the reforms. This allowed the stakeholders to experiment with alternative arrangements to cope with incoming shocks.

In the next sections a conceptual framework is developed and applied to nine export commodities in selected countries in SSA. To limit the coverage and for ease of analysis, this study focuses only on export crops, but the framework is equally applicable to other crops and sectors. The cases are cashew in Mozambique; coffee and tea in Kenya; cashew, coffee, tea, and tobacco in Tanzania; coffee in Uganda, and cotton in Zambia. This sample is not a representative one for SSA, but it is sufficiently diverse to illustrate the main hypotheses of the paper, and was selected on the basis of previous work done by the authors.[2]

1. Growth Accelerations and Growth Sustainability

As mentioned, Rodrik (1999 and 2007) differentiates between growth accelerations, which are more common and sustained growth over longer periods of time, which are rare. Growth accelerations usually require elimination of only a few key constraints that hold back the economic activity while sustained growth requires capacity and institutions to continuously monitor and eliminate emerging constraints. Sustained growth requires an ability to adjust to negative shocks.[3] Negative shocks or developments will have a greater impact the greater are social or political conflicts and the less developed are institutions for managing these conflicts.[4] This is more likely when there is no consensus on how to redistribute the income losses resulting from shocks among different groups. This framework suggests a distinction between "growth accelerations" and sustained longer-term growth. Growth accelerations usually require elimination of only a few key constraints that hold back the economic activity. Longer-term sustained growth requires the development and existence of institutions that can accommodate shocks and allow systems to rebound from negative developments.[5]

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to the producers because of appreciating local currencies. Output collapses took place when the international prices for such commodities started declining. For details, see Onal and Aksoy (2011).

[2] Individual case studies and other related papers are in " *Prices, Institutions, and Supply Response: Case Studies in African Agriculture, (*2011), Forthcoming,

[3] North *et al* (2009) also place the ability to adjust to shocks as a key variable creating higher growth in open access societies compared to limited access ones.

[4] The term "shock" is used throughout the study as an unforeseen development that upsets the status quo and requires collective action for its solution.

[5] Rodrik (2007) observes almost 80 cases of GDP growth accelerations, but few cases of sustained growth, i.e., growth that transforms the countries.

Rodrik (1999) expresses this relationship with the following functional form. Changes in growth rates depend on the magnitude and direction of external shocks, the existing degree of social conflict, and the strength of institutions of conflict management. A higher degree of social conflict would amplify the negative effects of an external shock while better institutions of conflict management would dampen its effects. Outcomes depend on the interactions of these three variables.

$$\Delta\, \boldsymbol{Growth} = \boldsymbol{External\ Shock} \times \frac{\boldsymbol{Existing\ Social\ Conflict}}{\boldsymbol{Institutions\ of\ Conflict\ Management}}$$

This general framework can also be applied to analyses of commodity policy reforms by treating reforms as a "shock."[6] Their initial effect is to change the distribution of incomes along the production and distribution chain, and therefore they are necessarily a potential source of conflict.[7] In the case of commodity market reforms the policy changes increase incomes of producers and new private sector participants and reduce incomes of intermediaries or other groups that were extracting rents from the sector. Thus they create both losers and gainers.[8] If the losing groups were small and the losses could be made up quickly, the degree of conflict would be lower than in the reverse case and the ability to create a consensus would thus be greater.

Social conflict and the inability to accommodate negative shocks would be greater when the agricultural policy reforms initially faced a significant disagreement. In such cases, the shocks that jeopardized the gains from reforms adopted would increase the opposition from groups that objected to the policy changes in the first place. There would be attempts to return to ex-ante environments, probably with little success. But this controversy would create uncertainties for the producers, and reduce the probability of having a successful adjustment or improvements in the original reform program. In cases where there were some agreement on the need and desirability of policy changes, adjustment to a negative shock would be easier. The degree of conflict and the new arrangements for conflict management would determine not only the success of the reforms in the immediate future, but also the outcomes of future shocks.

[6]The distinction between an internal and external shock is not very clear, especially in a commodity based analysis. For example, a change in the international price of a commodity is clearly an external shock but changes in real exchange rates which have the same effect as the change in international prices would be internal. In this paper the term "shock" will be used to denote a change that upsets the existing arrangements whether it originates internally or externally.

[7] This is pointed out by Acemoglu and Robinson (2006, p.20) "Most policy choices create distributional conflict; one policy benefits one group while another benefits different individuals."

[8] In the design of the reforms, their redistributive effects are not explicitly discussed. The implicit assumption is that the gains from greater output would allow everyone to gain from the reforms. However, the productivity and output gains are usually attained over a longer time period while the income losses are immediate. Furthermore, most countries lack the redistributive instruments to reallocate the incomes.

Table 1 shows the production levels prior and following the reforms for the sample cases.[9] Since each case has a separate reform date, five years prior to the reforms - including the reform year - and five years following the initiation of the reforms are used as pre- and post-reform periods. In seven out of the nine cases, output increased substantially following the reforms. The exceptions are coffee in Kenya and Tanzania. These results partially support the fact that there is significant short run supply response capability in SSA, and that the reforms, by changing the incentives for the producers, led to these output increases.

Table 1: Production Before and After the Reforms

Commodity	*Country*	Period		Production ('000 mt)		
		Pre-Reform	*Post-Reform*	*Pre-Reform*	*Post-Reform*	*2004-2008*
Coffee	Kenya	1988-92	1993-97	87	82	47
Coffee	Uganda	1988-92	1993-97	121	172	167
Cashew	Mozambique	1990-94	1995-99	23	39	41
Cashew	Tanzania	1988-92	1993-97	26	59	90[10]
Coffee	Tanzania	1990-94	1995-99	47	46	53
Tea	Kenya	1988-92	1993-97	187	229	336
Tea	Tanzania	1989-93	1994-98	90	105	141
Cotton	Zambia	1990-94	1995-99	47	79	152
Tobacco	Tanzania	1991-95	1996-00	22	35	52

The key constraint on the commodity sector performance was insufficient producer incentives. By eliminating most of the intermediate agencies and reducing and eliminating export taxes and restrictions, the agricultural policy reforms led to higher prices for the farmers. They fit into the categorization of the growth accelerations through the elimination of major constraints, and as expected they lead to spurts in output growth.

We also include the production levels for the last five years in Table 1 as a proxy for the longer-term sustainable growth outcomes. They are indicative of whether the initial supply responses were maintained and improved upon. Of course, given the cyclical behavior of production in many cases, output in the last five years might not give a clear sense of the sustainability of the growth process. [11] It is just another indicator in addition to our judgments on status of the sector around 2008. The case studies and the discussions below indicate that four cases of can be thought of as showing sustained growth. These are Zambia cotton, Kenya and Tanzania tea, and

[9] The details of the output movements along with the behavior of producer prices are analyzed in the following sections. For the further details, the reader is referred to the original papers.

[10] Cashew production in Tanzania is higher in the last five years but it is much lower than the peak production attained in the post-reform period (see Fig. 9).

[11] Commodity prices have been increasing for the last few years which might skew the results of the last five years.

Tanzania tobacco. In Kenya coffee, we do not observe increases either after the reforms or in the longer run. The other four cases can be treated as having non-sustained supply responses.

2. Reforms, Stakeholders and Redistribution

In many countries, the agricultural policy reforms coincided with political reforms. In Zambia, Kenya, and Tanzania, long time single-party systems were being abandoned and multi-party systems were being established. In Uganda and Mozambique, civil war had ended and attempts were being made to bring in multi-party systems although one dominant party maintained the control. While many of the old leaders stayed in power, the political processes became more competitive, new actors and groups obtained some voice and had to be accommodated in the distribution of the rents.

Along with political liberalization, the primacy of state in economic affairs was also being revisited. Many of the SSA countries had disastrous economic outcomes as a consequence of nationalization of production, processing, and marketing of export crops. In almost all countries there were attempts to privatize the economic activities, especially the parastatals involved in agricultural marketing and production. Agricultural reforms were undertaken under these set of circumstances.

Agricultural policy reforms ended up redistributing income from politically connected intermediary groups to mostly smallholder producers that had little connection to the political elites. This pitted the groups that were benefitting from the ancient regime against the groups that were to benefit from the liberalization. There were losses by the political groups that were associated with the management of the parastatals, groups that were in key positions in public service, and private groups that had been given monopolistic powers by the political system.[12] Many of the old and some of the new intermediaries and processors were linked to the political elite and parties. In some cases the revenue bases of local governments depended on taxation of export crops and they would have lost their revenue bases with reforms. Then there were groups like the agricultural producers and private marketers and processers that were to be the beneficiaries of the reforms.

Policies were also influenced by two groups that entered into the economic sphere at the time of the reforms. The first of these new groups were the multinational companies that entered the sectors and started to work with the smallholders.[13] Historically they had played a role through

[12] There are debates on whether one can define the managers and workers in the cooperative and parastatal sector as an interest group. In many countries they are among the local supporters (cadres) of the party in power or are associated with the tribe that was in power. Thus, the group in power needed to support them in one form or another to maintain its power base.

[13] In most countries these multinationals existed in one form or the other. But privatizations and liberalizations gave them the opportunity to establish themselves as the key actors in cotton production in Zambia and tobacco production in Tanzania. They were already established in the tea sectors in Kenya and Tanzania.

the large estates that they managed. Now they started working directly with the smallholders and were supplying the services that were provided by the parastatals before the reforms.

Second group that also had an important role in the policy discussions were the donor community. Most of the reforms in SSA were undertaken under pressure from the international financial institutions and other donors. This was especially important during the early 1990s when most of the SSA countries were effectively bankrupt, and the donor groups gained greater influence using their aid that shifted from project support to "structural adjustment" requiring policy reforms by the governments. Later they insisted on similar policy changes in return for debt write off.

One import indicator of changes in the income distribution is the share of the export price received by the producers. Historically this share has been very low which discouraged production and was seen as an important constraint to greater supply response. So a key objective of the reforms was to increase this share. This measure of redistribution was used as an indicator of success in the evaluations of African reforms (Townsend 1999).

Table 2 shows the share of export price obtained by the producers five years before the reforms and five years after the reforms. Changes in this ratio illustrate the changes in the distribution of income between the producers and intermediaries. In six out of nine cases, there is a substantial increase in the share of export price going to the producers. It shows that the reforms were successful in their objectives of transferring income from the intermediaries to the producers. At the same time these changes can also be interpreted as having disturbed the previous income distribution and political equilibrium and this disturbance can be an important reason for lack of consensus. In three cases, Tanzania tea, Tanzania tobacco, and Zambia cotton, the producers' share of the export prices did not increase after the reforms. The reforms in these three cases did not change the rent distribution against then-existing processors and intermediaries. Yet these are the three cases where there was longer term sustained growth. In the other six cases where there was significant redistribution; five of them did not achieve sustained growth after the initial spurt. These are cashew in Tanzania and Mozambique, and coffee in Kenya, Tanzania and Uganda. [14] While not perfect, these results suggest that redistribution played an important role in the sustainability of policy changes and growth accelerations.

Finally, the arrangements for production, processing, marketing, and support require specific institutional structures. As pointed out before, these were organized around the parastatals which were being eliminated with the reforms. Somewhat different institutional arrangements emerged for different commodities and countries after the reforms. It is to these organizational structures that we now turn.

[14] The sixth case of Kenya tea is a special case where the interests and the political base of the leadership and the smallholder tea producers coincided.

Table 2: Changes in the Producers' Share of Export Price Following the Reforms

Commodity	Country	Period		Producers' Share of Export Price	
		Pre-Reform	*Post-Reform*	*Pre-Reform*	*Post-Reform*
Coffee	Kenya	1988-92	1993-97	51%	80%
Coffee	Uganda	1988-92	1993-97	12%	39%
Cashew	Mozambique	1990-94	1995-99	22%	39%
Cashew	Tanzania	1988-92	1993-97	37%	54%
Coffee	Tanzania	1990-94	1995-99	73%	94%
Tea	Kenya	1988-92	1993-97	68%	85%
Tea	Tanzania	1989-93	1994-98	28%	26%
Cotton	Zambia	1990-94	1995-99	72%	60%
Tobacco	Tanzania	1991-95	1996-00	35%	34%

3. Political Economy of Institutional Arrangements and Outcomes

In almost all countries, the farming sector, especially the smallholders, need and receive significant price and non-price support. The non-price support, which includes research, inputs, extension, credit services and investments in supporting infrastructure, has to be taken into account in analyzing the output behavior of agricultural commodities. Furthermore, since a commodity is only one of the sectors among many, the amount of support it receives compared to other sectors is also important in determining its performance. [15]

An important part of the support is the organizational arrangements and the quality of the institutions that supply this support. In SSA before these reforms this support was supplied through the parastatals. [16] In general, these support systems have not been very effective in SSA

[15]Non-price supports can be classified under three main headings. First is the support through the development of new seeds, new disease mitigating activities, development of improved farming technologies, and other research related activities. Second are the investments in irrigation, drainage, transport, credit, marketplaces, etc to increase the productivity of farming and lower the cost of doing business for farmers. Third is the support through extension and similar programs that educate and help especially the smallholders to take advantage of the new research developments and farming systems. These are the activities that are implemented by the ministries of agriculture and constitute the core of the project support of international organizations such as the World Bank, FAO, IFAD, CGIAR, and others. It is possible to organize the non-price support to agriculture under different headings but the specific activities under these headings would be very similar.

[16] In some countries, new seeds, better ways of farm management, infrastructure support etc were supplied reasonably efficiently by the public sector such as coffee in Vietnam and cotton in India and China. Earlier work on

(World Bank 2008) and most of the public agencies tasked to undertake this support had actually taxed the agricultural sectors through interventions in marketing and processing rather than providing farmers with better seeds, new technologies, better transport, and easier access to credit. At the time of the reforms, most of these agencies had gone bankrupt and were not effectively supporting the sector. Therefore, the reforms focused primarily on eliminating these often bankrupt marketing companies along with removing restrictions on trading and production of the crops and reducing export taxes.

The agricultural policy reforms also intended to reform these public institutions to deliver better support to agricultural production, especially to the smallholders.[17] Yet these reforms did not create the type of institutions that could manage the conflicts that existed or could arise under lower international prices or other internal or external shocks. Furthermore, the institutions that existed, such as cooperative associations, ministries, and other agencies, were not designed to manage potential problems because both the legal arrangements and the relevant stakeholders had changed with the reforms. Thus, the reforms were mostly policy changes without significant institutional development.

In the cases where the existing arrangements were more satisfactory, usually there was an established marketing agency that had been given some autonomy by the political leadership. In these cases, it was easier to move to a framework of greater autonomy and efficiency of delivering support. Kenya Tea Development Agency (KTDA) is one such example. In other cases, this efficiency and autonomy were assisted by the existence of strong multinational companies that protected these agencies and the smallholders associated with them. Tea and tobacco in Tanzania and cotton in Zambia show that large international companies can extend significant support to the commodities given their resources. Existence of specialized research institutes, dedicated programs on seeds, pesticides, credit, etc also help the farmers to overcome the shocks and have higher long run growth rates. Technological developments and their rapid dissemination such as Bt cotton in India and China which increased yields and outputs significantly are equally important. In such cases, there are discontinuities which have to be treated outside the normal paradigms.

In other five cases, the old parastatals were either privatized in name or given so called autonomy. These agencies continued to behave in a way similar to what they had been doing before with some ad hoc improvements. Availability of special donor projects for these commodities sometimes created periods of increased support. In Mozambique INCAJU is still very much a public agency despite the fact that it was privatized long time ago and its support to the smallholders is considered to be quite weak. In Kenya and Tanzania, the coffee cooperatives continued to control marketing of coffee and were never really privatized and created an

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agricultural service delivery had shown that even before the Doi Moi reforms, there was an efficient and extensive system of support for the agricultural households (Aksoy and Isik-Dikmelik 2007).

[17] Sector investment programs complemented the agricultural reforms in many countries and tried to integrate the donor support around a common investment and institutional development program.

inefficient system of supporting the smallholders. In Tanzania cashew, there was a series of changes where the cooperatives and local governments came into the marketing channels after the reforms time and again. In Uganda, UCDA which is a statutory public agency, never really operated as an efficient supplier of support. This does not mean that these agencies did not support the producers at all. For example, cashew spraying and seedlings were supported in both Mozambique and Tanzania. But these supports were not efficient, longer lasting, and effective to change the nature and the profitability of the commodity in question.

A related question is why the parastatals were eliminated in some cases but stayed as quasi-parastatals in others. Again, our hypothesis is that these outcomes are not independent of the original social and political consensus about the reforms and the degree of conflict about the reform program. As will be explained below, the evolution of the support systems are not accidental and are also determined by the strength of different groups of stakeholders, and their ability to transfer the resources to the different groups. The interaction of the political and social conflicts also gets reflected in the organizational support structures.

In the nine Sub-Saharan African cases analyzed here, three different post-reform institutional arrangements have evolved. Of course, these are not the only institutional arrangements that are possible. However, these are the ones that have been identified in these specific cases. These organizational structures are related to the crop's role in political rent seeking and relative powers of different groups with a stake in the distribution of rents. First two groups, which we identify as more successful, are the ones where there was less initial political and social conflict on the reform program, the world price of the commodity in question are less volatile, and there was better non-price support.

3.a. Direct Support by Large Multinationals

In SSA, one outcome of the reforms was the replacement of the parastatals by large international companies that supplied inputs, extension, and created a ready market for the output, under quasi-monopsonistic conditions. Cotton in Zambia and tobacco in Tanzania fit this description (Yagci and Aksoy 2011, Mitchell and Baregu 2011b). These monopsony powers were legally structured in Tanzania and were very effective while less formally structured and less effective in Zambia. In both cases, the export crops were not very significant in terms of their size and were not major sources of patronage to politically connected groups before the reforms. In both cases, parastatal companies were effectively and quickly privatized along with their processing facilities. The private multinational companies were allowed to find solutions to side-selling and the lack of contract enforcement -a basic problem with outgrower systems- without heavy-handed interventions by the state. In the terminology developed earlier, these cases could be classified as having less social and political conflict and a greater degree of political consensus on the reform program.

In Zambia, the public sector cotton parastatal LINTCO, had a monopoly in cotton ginning and marketing and had been effectively bankrupt. LINTCO had not paid the farmers regularly for a long time, and last few years, even its staff was not being paid for many months. It was privatized at the end of 1994 and its ginneries were sold to two multinational companies. There was little controversy at its privatization and most of the staff was absorbed by the new companies. These companies started supplying credit, technical assistance, and seeds to the smallholders and bought the cotton and deducted the cost of the inputs from the sale proceeds. Output more than doubled after the reforms but declined rapidly after 1997-98 due to side-selling, credit defaults and the collapse of the original arrangements (see Figure 1). But even the collapsed level of output was much higher than it was before the reforms. By 2001 new arrangements were established and output started to increase and the output peak in 2005 was fourfold higher then pre-reform levels. The arrangements collapsed again in 2006 due to a price shock caused by the significant appreciation of the currency. Again new arrangements were established and output has started going up again. These output increases took place despite steadily declining real producer prices (Yagci and Aksoy 2011).

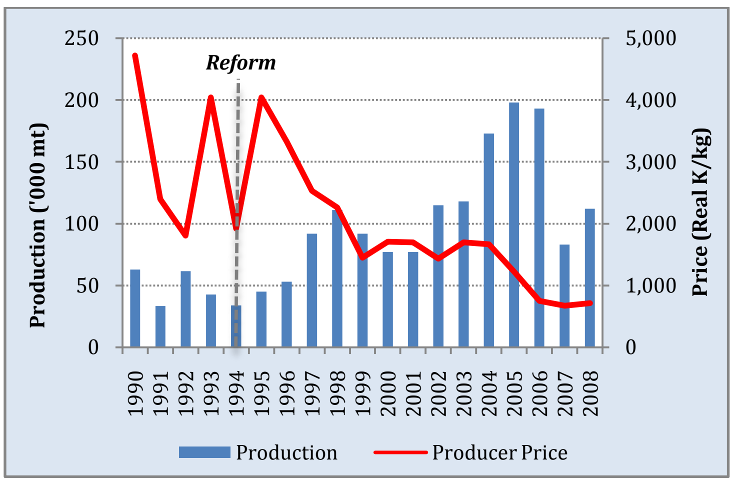

Figure 1: Cotton Production and Producer Prices in Zambia

In Tanzania private sector was allowed to market tobacco in 1995 and the processing company was privatized in 1997. There was a marked increase in output after the initial reform which continued until 1997 (Figure 2). When the parastatal company was privatized, two multinational companies entered the market and started giving credit and supplied inputs to the smallholders. In 1998 there was a credit default by the farmers due to side-selling. The companies reduced their input supply and lowered prices paid to the farmers to compensate for the loan losses. This led to declines in output. A new arrangement was reached in after 2000 when a quasi-monopsonistic arrangement was instituted and output exploded helped by more satisfactory non-price support and gradually increasing producer prices (Mitchell and Baregu 2011b).

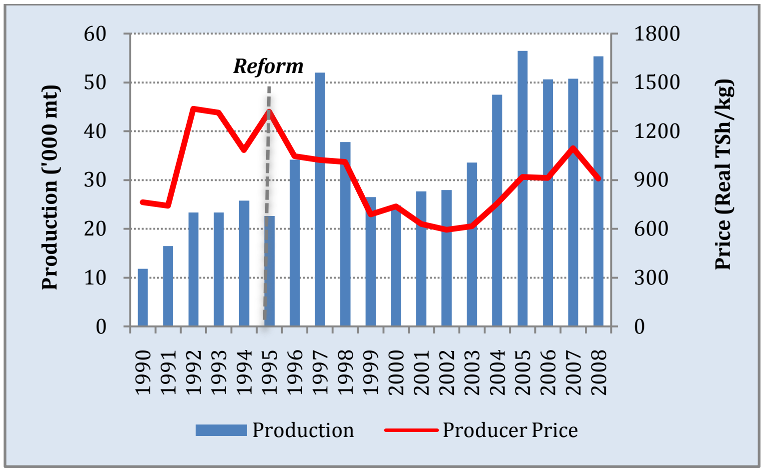

Figure 2: Tobacco Production and Producer Prices in Tanzania

In these two cases the reforms were successful despite internal and external shocks and other structural breaks. The sectors were able to find ways to reestablish a new equilibrium and continue the growth process. Output in both cases increased substantially despite the fact that producer price did not increase significantly. Significant quality increases were also achieved in both cases due to better extension by the multinational companies. These companies, in both cases, were permitted by the state to experiment with alternative contractual arrangements for the provision of "support" while exercising their monopsony powers. Both experienced negative shocks and output collapses, once in the start of the privatization program in Tanzania due to side-selling, and twice in Zambia -once due to side-selling and once due to a price collapse caused by the appreciation of the currency.[18]

At the same time, there are differences between the two cases. First, the Tanzanian tobacco producers were able to establish a tobacco board from the beginning and were allowed to set up a company that was an effective monopsony. In Zambia, there were attempts to set up a cotton board but it never became effective and the firms were left to their own devices.

Second, throughout the period of 1990-2008, the volatility of cotton producer prices in Zambia was more than twice as high as the volatility of tobacco prices in Tanzania. So the higher price volatility in Zambia cotton could have contributed to the two collapses.

Third, significant productivity increase occurred in Tanzania tobacco after the reforms, while there was almost no productivity increase in Zambia cotton. While there might be alternative explanations for the difference -higher volatility, shocks in the middle of the reform period, etc- one possible explanation might be the selection of the farmers. In Zambia, the expansion was carried out essentially by increasing the number of farmers, thus area expansion. Most of the

[18] Recent policy reversals in Tanzania and elimination of the longer-term contracts might create another collapse if not managed carefully.

farmers that were added on in the years of expansion were smaller producers that had much lower productivity. The addition of the lower productivity farmers kept the average productivity from increasing. In Tanzania, the farmers that produced tobacco have been larger ones because the establishment of curing barns requires more substantial farmer investment than the production of cotton. Thus, the entry of new and inexperienced farmers was much less in tobacco than in cotton. Significant investments by the larger farmers for curing barns etc signal more credible contractual and larger financial commitments. Therefore, vertical coordination along the supply chain can more easily be achieved with larger farmers than with smaller producers that have less investment in their commodity production.[19]

3.b. Protective Structure with International Estates

The second group where the reforms were also successful consists of tea sectors in Tanzania and Kenya (Mitchell 2011).[20] They fall into a category where the large multinationals have successfully erected a support mechanism for the smallholders. The tea sector is somewhat different than the other commodities because the output has to be processed very quickly, and the multinational companies dominate the international market. Tea prices have been rather stable, and the arrangements for international marketing have also been dominated by the multinational tea companies.

The tea sector in Kenya has always been very well managed and continued to be well managed after the privatization of the KTDA in 1992.[21] The KTDA has effectively supported this sector by supplying research, inputs and technical assistance and was not involved in the marketing of tea. Both estate and smallholder production has increased at similar levels. Despite declining producer prices, output has continued to increase, and quality has continued to improve (Figure 3).

[19] The new YIELD program started by Dunavant in Zambia seems to recognize the differences between large and smaller farmers and tries to focus on the larger farmers which might have higher productivity and longer term commitment to the sector.
[20] For the Tanzania tea case we rely primarily on the work of Baffes (2005a and 2005b), Ochieng (2010), and Tyler (2007).
[21] In Kenya, both the coffee and tea sector reforms were undertaken under the Public Enterprise Reform Program supported by the World Bank. There were also investment programs for both tea and coffee. While the tea projects were highly successful, the coffee projects were not.

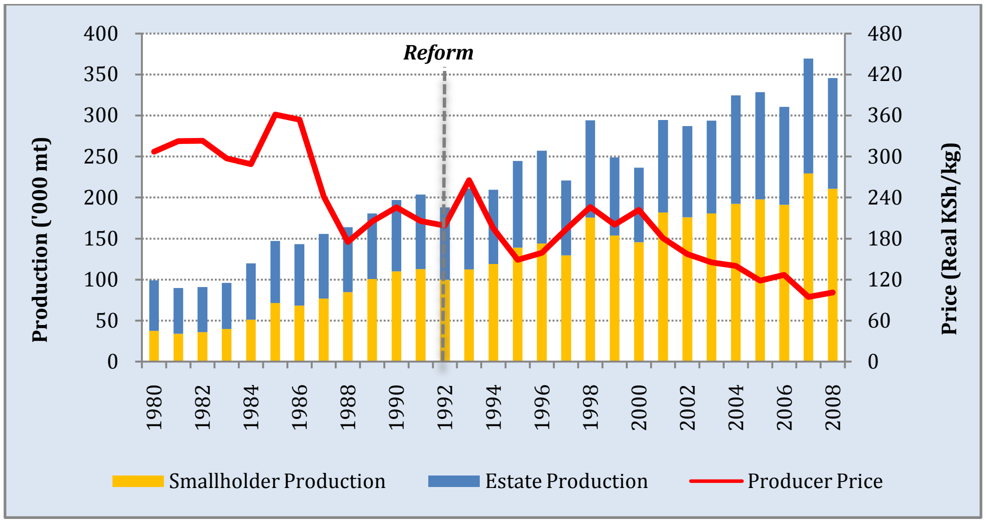

Figure 3: Tea Production and Producer Prices in Kenya

While Tanzania nationalized most export crop estates, tea was mostly excluded. Only two tea estates were nationalized because they were a part of a holding company that was nationalized. After the reforms in 1993, the two nationalized estates were privatized. In 2000 six of the tea factories owned by the tea authority were sold and the regulatory and development functions of the tea authority were separated. The sector has expanded and the support mechanisms developed jointly with the estates have been improved. The output has continued to increase despite declines in producer prices (Figure 4).

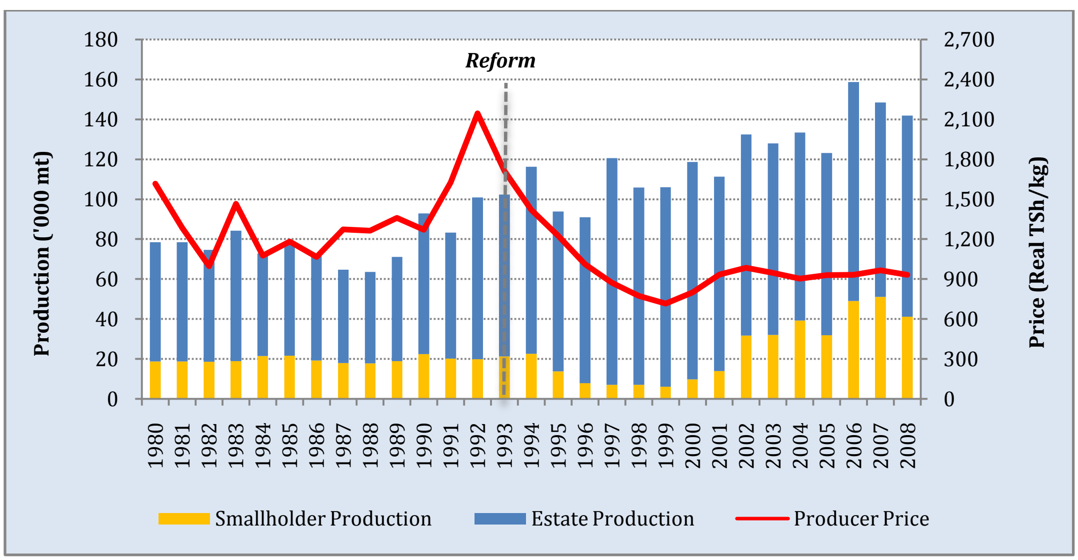

Figure 4: Tea Production and Producer Prices in Tanzania

In these two cases the multinational tea companies were rather strong, in both local and international markets. In both cases support to production was available because estates provided a part of the output. Baffes (2005a, p.590) has argued that the tea sector has been different than the other sectors in Tanzania. "First, the reforms of the tea sector started much earlier than Tanzania's other export crop sectors (e.g. coffee, cotton, cashews). Second, there was no apparent 'supply-driven' assistance or push for reforms; by and large, reforms originated from within the country, accordingly characterized by a considerable degree of government and sector ownership. Third, the reforms have been largely successful, although much remains to be done. Finally, it has taken a considerable amount of time and resources for the reforms to be carried out." In Tanzania, the nationalization of most enterprises spared the tea estates except the two companies which were part of nationalized holding companies.

In Kenya, KTDA has always been successful and it is one of the very cases where privatization has converted it to a smallholder owned company (Tyler 2007, Ochieng 2010). Under President Kenyatta, predominantly coffee and some tea producers, which were predominantly Kikiyu from the Central Province, were allowed a great degree of institutional and associational autonomy supported by a friendly government.[22] They were the basis of the political support for the Political system under Kenyatta. In 1978, President Moi was selected and its support base was the Kalenjin group from the Rift Valley. The change in the presidency meant that the power base of President Kenyatta, which was the coffee and tea producing Kikiyu households, had to be disfranchised. This led to the total takeover and mismanagement of the coffee sector by the Government and its long term demise will be explained in the next section. In the case of tea, however, there were other developments. Commonwealth Development Corporation (CDC) and World Bank had outstanding loans to KDTA and had veto powers on some of the decisions (Ochieng 2010). Bu the most important was the expansion of tea production outside the Central Province and among Kalenjin groups in the Rift Valley. There were increased incentives provided to the production of tea by non-Kikiyu groups in sections of the Rift Valley province where it was not grown before (Lofchie 2004). Thus a new arrangement which supported the groups allied with the political leadership meant that policy changes did not reverse the quasi independence of KTDA which was fully privatized to the smallholders in 2000. Therefore, there were historical developments that helped the sector to maintain its quasi autonomous status and there was much less controversy and conflict on its reform.

Thus the estates and smallholder support agencies in both countries were left to manage themselves. They also created a protective structure around the smallholders through supplying them with inputs; know how; and purchasing their crops and paying them on time. The tea sector reforms were successful.

[22] In the case of coffee, the policies which supported the Kikiyu coffee producers were abandoned and reversed to bring in greater control by the state.

3.c. Reforms with Quasi Reformed Parastatals

In the third group of cases, there was an initial positive supply response after the agricultural policy reforms. But this supply response could not be maintained in the face of internal and external shocks. These are cashew in Mozambique and Tanzania, and coffee in Kenya, Uganda, and Tanzania (Mitchell and Baregu 2011a, Aksoy and Yagci 2011, Mitchell 2011, Baffes and Onal 2011). These are a rather narrow set of commodities and countries, but they are representative of many other cases in the SSA, where major liberalizations gave way to ad hoc support arrangements. In all these cases, the parastatals were privatized but continued to be tied to the state. In all these cases, the smallholder producers were not aligned to the interests of the political leadership, but the intermediaries were. In all five cases, reforms changed the distribution of income in favor of the producers. The quasi-parastatals and other intermediaries tried to reverse the changes in the distribution through regaining the control the production and marketing. The controversies associated with these conflicts led to lack of sustained support to the smallholders. In these cases the supply depended on the behavior of international prices and domestic exchange rates as well as the ad hoc supports supplied by these quasi-parastatals or donors. In these five cases, reforms led to immediate output increases, but negative price shocks along with continuing conflict led to anemic long-run growth.

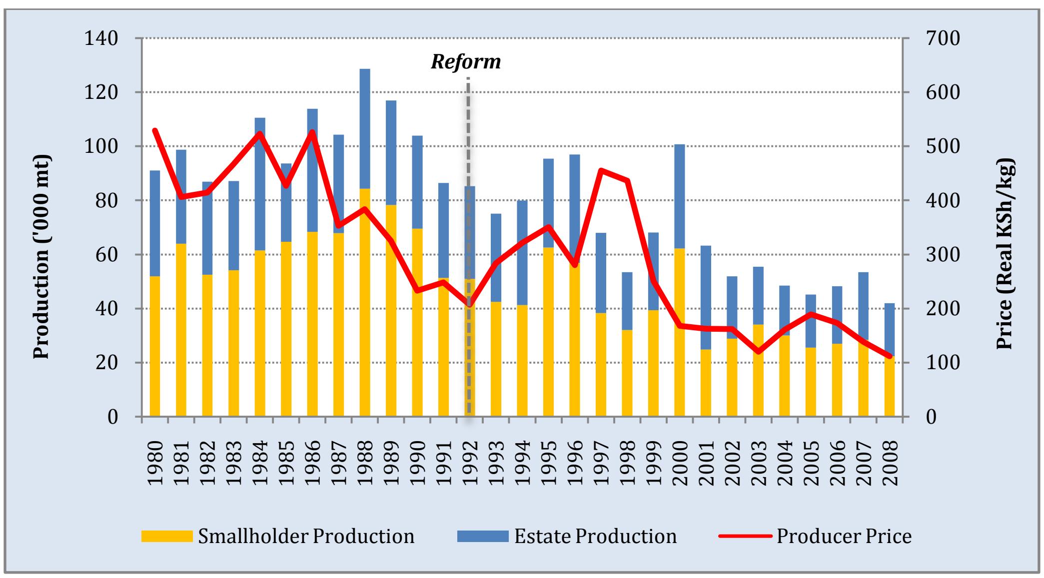

Figure 5: Coffee Production and Producer Prices in Kenya

Coffee was one of the key export sectors in Kenya throughout the 1970s and 1980s. New governments decided to reduce the incomes and political power of the coffee producers. Reforms to reduce the control of the cooperatives, allow private sector millers, and let the producers to conduct trades in foreign exchange were implemented in 1992. This led to a pickup in production assisted with the increases in producer prices until 1995. In 1997 the remaining positive controls on cooperatives were lifted and the inefficient cooperatives were allowed to operate without any controls. They were also staffed by people not associated with the producers (Mude 2006, Nyangito 2001, Mitchell 2011). These developments and declining producer prices led to a major decline in production (Figure 5).

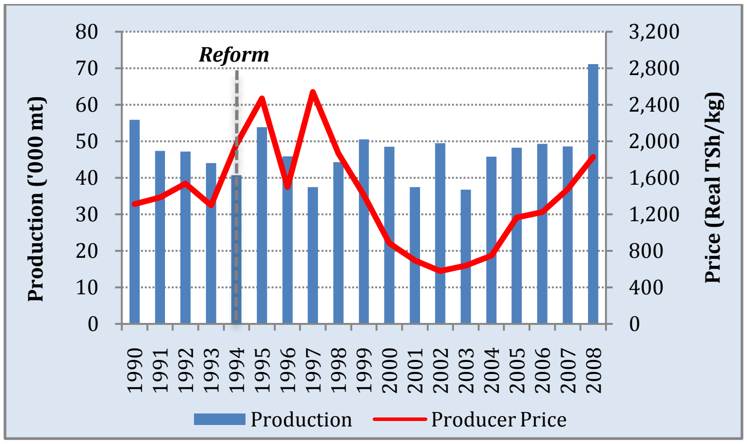

Figure 6: Coffee Production and Producer Prices in Tanzania

Performance of the coffee sector in Tanzania also illustrates a case where the supply response to the reforms was weak and output basically followed the trend in producer prices (Figure 6). This despite the fact that many coffee estates have been privatized and outputs in these estates have increased. In 2003, a direct marketing channel was opened for specialty coffee producers. This change along with increasing producer prices led to some increases in output. Despite these recent positive developments, output at the end of the period is about the same level as they were just after the reforms (Baffes 2005b, Mahdi 2010, Lofchie 2004).

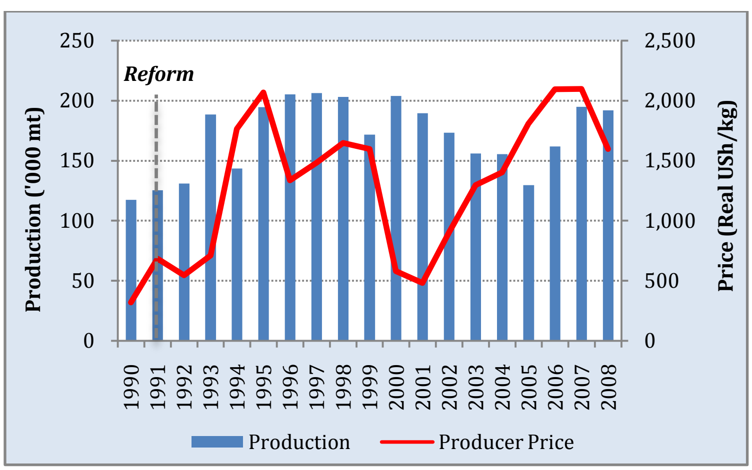

Figure 7: Coffee Production and Producer Prices in Uganda

The Uganda coffee sector illustrates the positive effects of the reforms which could not be maintained and improved. Reforms coupled with increasing international prices have led to an almost doubling of output in a few years (Figure 8). Producer prices both due to the increasing share of export price paid to the farmers, devaluation, and the increase in international prices. Collapse of international prices, inability to deal effectively with the wilt disease, and a very unsuccessful replanting program led to the gradual collapse of output. By 2005, coffee output had declined to its level before the reforms. Producer price increases since then have led to an increase in output but by 2008, it had not reached its level of late 1990s (Baffes and Onal 2011).

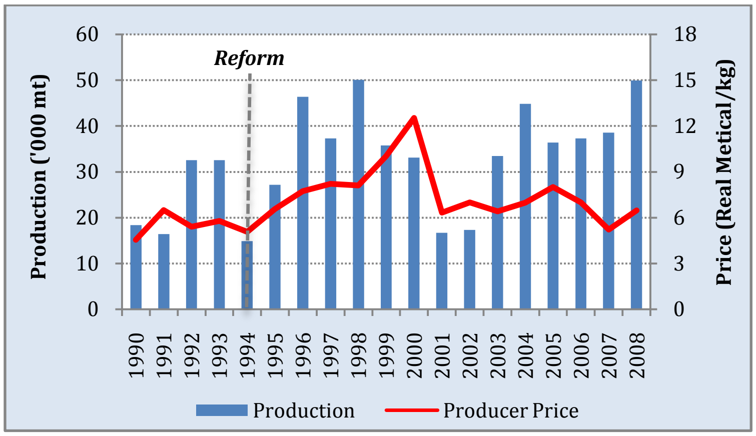

Figure 8: Cashew Production and Producer Prices in Mozambique

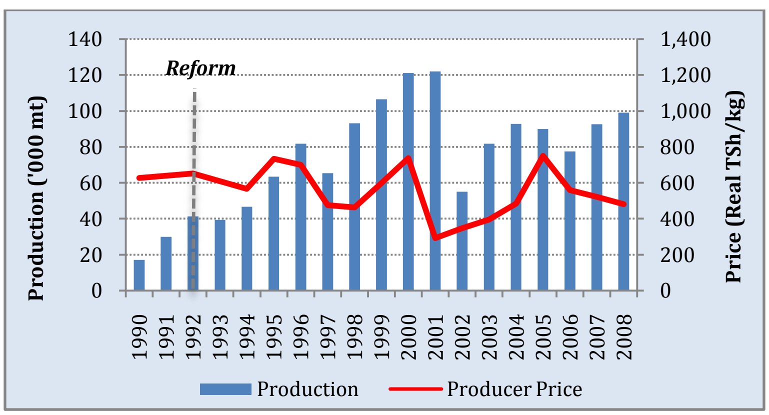

Figure 9: Cashew Production and Producer Prices in Tanzania

Cashew reforms in Mozambique have been one of the most contentious and highly publicized reforms in SSA. Export restrictions on raw cashew were eliminated in 1994 and there was a rebound in marketed output despite high export taxes. This continued until 2000 when international prices collapsed along with the output. There was a gradual improvement in the response over the mid-2000s supported by developments in labor intensive processing, support with spraying for diseases, and a replanting program. Despite these more positive developments, officially marketed output only reached its post reform peak in 2008 (Figure 9).

Tanzanian cashew reforms started in 1992 when marketing was liberalized and private sector participation in marketing was allowed. Within few years, private sector developed input and marketing channels and there was also a shift from selling processed nuts to raw nut exports. After 1999, local governments slowly started to increase the taxes on cashew output, which reached as high as 60 percent of the value of output. There were partial attempts to reverse these policies, but they were all short lived and the local authorities managed to affect the payments to the smallholders either directly through taxation or through cooperatives and primary societies. Cashew Board of Tanzania managed to affect the pricing and marketing decisions throughout this period. While the output has started to increase during the last few years, it is much lower than its peak level achieved during the early 2000s and much lower than the levels obtained in the early 1980s. In 2007, the new warehouse receipts system brought the cooperative back directly into the marketing system which does not bode well for the future (Mitchell and Baregu 2011a).

In all these cases, there are a series of common themes. Initially, the distributive system was very much against the producers, and the reforms increased the producers' share of the world/export prices. The reforms effectively redistributed income from the processors (intermediaries) to farmers, leading to higher producer prices and increases in production in the immediate post-reform period. In almost all cases, there were also conflicts and disagreements on the nature of the reform program. Arrangements for arbitration and mechanisms to monitor the emerging problems of the sector were absent. These five cases (cashew in Tanzania and Mozambique, coffee in Tanzania, Kenya and Uganda) fit into the structure of the developments outlined in the earlier sections of the paper where the reforms removed the immediate binding constraints on production and thus there was a supply response but did not create institutions that could sustain the changes.

There were no support mechanisms built into the reform programs or developed after the reforms. There were ad hoc attempts to support the smallholders but none of them were systemic institutional changes.

In cashew reforms in Tanzania and Mozambique, there were powerful groups that had large losses and thus a consensus on the reforms could not be achieved. In Tanzania these groups included the local governments and cooperative unions, while in Mozambique the losing group was private processors closely tied to the ruling party. Success of the coffee reforms in Kenya depended on the outcomes of a tribal struggle. Coffee growers supported the earlier regime and were penalized for it by the new government (Lofchie 2004). The reforms were never successful. Thus, the degree of political conflict for coffee reforms was quite high, which could have amplified the impact of external shocks. In Tanzania coffee, the cooperatives effectively blocked reforms and continued to extract rents through local taxes or controlling the marketing systems (Baffes 2005b, Mahdi 2008). Even a decade after the reforms, most of the policy changes are still controversial and there is still no consensus on their desirability.

Reforms increased the share of the world/export price going to the farmers. Farmers responded if this increase in their shares also corresponded to an increase in the real producer prices. If those were also favorable, that is not decreasing substantially; output expanded. The supply response continued until an international price collapse or an intervention by the state occurred to reverse the price increases for the producers. Due to a lack of systemic support arrangements, output in this group of five countries has been much more sensitive to real producer price developments than the other two groups where support could maintain the supply response despite unfavorable prices.

The current outputs in these cases are often at their levels which were obtained just after the reforms. It is the prices that drives the output, but within limits of what has been obtained before. Output increases have occurred in recent years primarily because of increases in international prices. In these cases, we do not observe structural changes leading to much higher output levels like the two other more successful groups.

4. Conclusions

In this paper we have sought to develop a framework to help explain the outcomes of agricultural sector reforms in Sub-Saharan Africa using a set of nine case studies as examples. The framework is inspired by the work of Rodrik that postulates that sustained GDP growth is a function of the degree of consensus that exists in a society and ability and strength of institutions to manage distributional conflicts. Shocks, especially price shocks, whatever their cause, can trigger conflicts because they redistribute incomes from one group to another. The greater the consensus around an initial set of policy reforms, the higher the likelihood that groups found and developed new arrangements to solve such conflicts and continue growing. Where such an initial consensus is lacking shocks are more likely to result in policy reversals. It is not the design of the initial reform that guarantees success, but the ability of the stakeholders to redistribute incomes (accept redistribution) when an unexpected development takes place. We argue that this is determined to a large degree by the level of consensus that existed on the initial reforms.

Reforms are multi-stage processes. The focus of the agricultural policy reforms in SSA was predominantly on the "first stage" in which regulatory and fiscal constraints on the private sector were reduced or eliminated. Following such first stage reforms production increased in seven of the nine cases analyzed here, and the reforms appeared to be successful. This initial positive response often led the governments and the donors to complacency and delayed actions to respond to potential problems. In some cases where farmers received a higher share of export prices and increased their output, these output gains were not sustained. We attribute this to the significant redistribution from the elites to the farmers, which led the former to try to reverse the reforms and destroy the new arrangements. In many cases the crises were also triggered by a negative price shock that lowered producer prices and exacerbated the conflict among different stakeholders on how to redistribute the reduced returns. The absence of significant non-price support in many cases amplified the effects of these shocks and delayed the supply response when prices improved.

On the other hand, there are cases where the reform programs were successful despite internal and external shocks. In these cases, the sector was able to reorganize itself, find ways of meeting the new challenges and reach a new equilibrium which led to sustaining growth in output. Examples included the redesign and extension of smallholder support mechanisms and better non-price support programs. Support institutions in these cases were given greater autonomy and were more efficient – responses to shocks were quick and positive.

Our main hypothesis is that the key variable that explains the capacity to respond to external and internal shocks is the degree of political and social consensus on the reforms. In the cases where the first-stage positive supply response could not be maintained, the degree of political and social consensus on the reforms was also weak from the beginning. In addition, the mechanisms to redistribute income after a negative shock were not built into the new institutional arrangements. Old groups which received rents from the activity either maintained their shares or came back in after the reforms to reestablish their shares. The conflicts also led to an under supply of services to smallholders, which led to fights over a smaller output. The cases discussed in this paper also show that without generating an acceptable outcome among the stakeholders, attempts to develop effective and efficient support systems can easily fail as they may be corrupted and used to reestablish pre-reform distributional outcomes.

In the cases where the reforms were successful, there was greater consensus on the reform program. The rent seeking fight was not intense and usually producers were one of the stakeholders supported by the governments. Although difficult to prove conclusively, the existence of more autonomous and efficient non-price support agencies could also be related to the lack of conflict around these commodities. From our limited cases, one important new development seems to be the entry of international companies and their operation through new legal arrangements supported by international donors. This model seems to work better if the product is small vis-à-vis the rest of the economy and is not important historically as a key sector in rent allocation. The successful cases also suggest that non-price support is as important as the pricing of the commodity. But low shares given to the farmers under these arrangements leave them open to predation by other private sector entrants or by previous stakeholders such as cooperatives and other agencies. Finally, in most of the successful cases, there was enough political and economic space for the stakeholders to find alternatives to the existing arrangements in the face of external and internal shocks.

The literature argues that in low income countries with less developed institutional systems, positive outcomes depend on the agreements among the elites that determine the allocation of benefits among the groups they support (Levy 2011, Levy and Spiller 1996). In all our cases, there were established arrangements before the reforms where the parastatals were used to allocate the rents among different groups. In some, it was the cooperatives and local governments, in others politicians and the public sector employees were involved in the distribution. When these systems collapsed in late 1980s, conflicts came to the fore and new groups emerged that had a say in the outcomes.

There is sufficient diversity in the outcomes across similar products and countries to suggest it is possible to have local level outcomes that are different from national ones. There can be local successes as well as failures. The cases discussed in this paper suggest that rather than trying to model the political economy structures within countries, more emphasis should be placed on sub-national and sectoral arrangements and outcomes (Levy 2011). Without well-developed institutional support structures, and explicit agreements between all stakeholders, it is difficult to generate sustained growth episodes even in micro and local environments. Formal or informal mechanisms that bring the stakeholders together and allow the parties to develop alternatives to shocks and unforeseen developments seem to be the only reasonable strategy.

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